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1986

PRELIMINARY ASSESSMENT

OF

LAKES, STREAMS, AND GROUNDWATERS

IMPAIRED BY NONPOINT SOURCES OF POLLUTION

IN MONTANA

Source:

MONTANA WATER QUALITY

1986

Water Quality Bureau
Environmental Sciences Division
Department of Health and Environmental Sciences
Helena, Montana 59620

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Table 3-2. Montana stream segments having predominantly man-caused water quality problems verified by data on STORET that could be improved by existing regulatory authority and pollution control programs, resources permitting.

Map No. (1)	Stream Segment (2)	Estimated Length (miles)	Basin	Probable Impaired Uses (3)	Pollution Sources (4)	Severity Index (5)	Control Programs (6)
1	Beartrap Cr. below Mike Horse Dam and Adit	1	Upper Clark Fork	A(C),P	IM	70.14 A,B	1
2	Fisher Cr. below Glengary Mine	3	Upper Yellowstone	A(C),P,R,I,L	IM	60.71 B,F	1
3	High Ore Cr. below Comet Mine	4	Upper Missouri	A(C),P,I,L	IM,M	47.71 A,B,F	1,7
4	Corbin Cr. (tributary of Spring Cr./Prickly Pear Cr.) (2)	3	Missouri-Sun-Smith	A(C),P,R,I,L	IM	47.36 A,B,C,F	1
5	Bozeman Cr. below Bozeman	1	Upper Missouri	A(C),R	O,U,A,IA	43.42 A,B,F,G	2,5
6	Reese Cr.	8	Upper Missouri	A(C),R	A,IA	39.96 A,B,F,G	2
7	Pipestone Cr. (2)	22	Upper Missouri	A(C),P,R	A,HM,N	39.42 B,F	2,6,7
8	Mike Horse Cr. below Mike Horse Mine Adit	1	Upper Clark Fork	A(C),P,I	IM	34.61 A,B,F	1
9	Camp Cr.	25	Upper Missouri	A(C),R,I	A	30.12 B,F,G	2
10	Galena Cr. (tributary of Org Fork Belt Cr.)	2	Missouri-Sun-Smith	A(C),P	IM	29.36 A,B,F	1
11	Depot Cr. below Browning WWTP	1	Marias	A(C),P,R	Browning WWTP	28.42 A,B	3,5
12	Sand Coulee Cr.	13	Missouri-Sun-Smith	A(C),P,R,I	IM,A	28.18 B,F	1,2
13	Old Maid's Coulee below Cut Bank WWTP	2	Marias	A(C),P,R,I	Cut Bank WWTP,N	25.81 B	3,5
14	Powder R. (2) -	218	Lower Yellowstone	A(W),P,R,I	I	23.31 A,B,E,F	5
15	Ashley Cr. below Kalispell WWTP (2)	7	Flathead	A(C),P,R,I	Kalispell WWTP,A	21.47 A,B,C,D,F,G	2,3,4,5
16	Cottonwood Cr. (tributary of Sand Coulee Cr.)	7	Missouri-Sun-Smith	A(C),P,R,I	IM,A	19.28 A,B,F	1,2
17	Uncle Sam Gulch blw Crystal Mine	3	Upper Missouri	A(C),P,R	IM	18.98 A,B,F	1
18	Muddy Creek (2)	24	Missouri-Sun-Smith	A(C),P,R,I	IA,N	18.77 A,B,C,D,F,G	2,6,7
19	Dry Fork Belt Cr.	12	Missouri-Sun-Smith	A(C),P	IM	17.80 A,B,F	1
20	Prickly Pear Cr. below Spring Cr. (2)	35	Missouri-Sun-Smith	A(C),P,R,I,L	IM,I,HM,IA,N,U,G, Helena WWTP, East Helena WWTP	17.09 A,B,C,D,F,G	1,2,3,5,6,7, 8
21	Silver Bow Cr. above Warm Springs Ponds (2)	23	Upper Clark Fork	A(C),P,R,L	Butte WWTP,IM,I, U,O	14.74 A,B,C,D,E,F	1,3,4,5,7,8
22	Hyalite Cr. below Forest Service Boundary	20	Upper Missouri	A(C),R	A,IA,O	14.22 A,B,F,G	2,5
23	Soda Butte Cr. below McLaren Tailings (2)	4	Upper Yellowstone	A(C),P	IM	12.70 B,D,E,F	1,5
24	Spring Cr. below Corbin Cr.	2	Missouri-Sun-Smith	A(C),P,R,I,L	IM	12.62 A,B,C,D,F	1
25	Blackfoot R. above Lincoln	24	Upper Clark Fork	A(C),P	IM	11.00 A,B,F	1
26	Spring Cr. below Ronan (tributary of Crow Cr.)	3	Lower Clark Fork	A(C),R,I	IA,O,U	10.67 A,B,F,G	2,5
27	Hot Springs Cr. below Hot Springs WWTP (2)	6	Lower Clark Fork	A(W),P,R	Hot Springs WWTP, N,C,A	10.17 B,F,G	2,3,5
28	Fool Hen Cr. (tributary of Virginia Cr.)	2	Missouri-Sun-Smith	A(C),P,L	IM	10.15 A,B,F	1
29	Snowshoe Cr.	5	Kootenai	A(C)	IM	9.32 B,F	1
30	Belt Cr. below Dry Fork Belt Cr.	40	Missouri-Sun-Smith	A(C),P,R,I,L	IM,A,F,WWTPs,O	8.89 B,F	1,2,3,5
31	Canyon Cr.	14	Upper Yellowstone	A(C),P,R,I	IA,N	8.82 B,F,G	2
32	Coller Gulch (Judith Mountains)	4	Musselshell	A(C),P,R,L	IM	8.73 A,B,F	1
33	Montana Gulch(Little Rocky Mtns.)	4	Middle Missouri	A(C),P	IM	8.66 A,B,F	1
34	Mason Gulch(North Moccasin Mtns.)	1	Middle Missouri	A(C),P	IM,M	8.34 B	1,5
35	Willow Cr. below Depot Cr.	20	Marias	A(C),P,R	Browning WWTP	8.26 B	3,5
36	Clark's Fork R. (2)	141	Upper Yellowstone	A(C),P,R,I	A,IA,N,IM	6.69 A,B,F	1,2
37	Godfrey Cr.	8	Upper Missouri	A(C),P,R	A,N	6.45 B,F	2,5
38	Beaver Cr. below Lake Bowdoin	40	Milk	A(W),P,R,I	HM,N,A	6.19 B,F,G	7
39	Cataract Cr. below Eva May Mine	5	Upper Missouri	A(C),P,R	IM	6.18 A,B,F	1
40	Virginia Cr. below Fool Hen Cr.	6	Missouri-Sun-Smith	A(C),P,L	IM	5.98 B	1
41	Teton R. below Muddy Cr. near Collins	124	Marias	P,I	IA,HM	5.96 A,B,F,G	7
42	Number Five Coulee (tributary of Sand Coulee Cr.)	6	Missouri-Sun-Smith	A(C)	IM,A	5.48 A,B,F	1,2
43	Beaver Cr. (2)	60	Little Missouri	A(W),P,R,I	A,Wibaux WWTP,N	5.12 B,F	2,3

Table 3-2. Continued

Map No. (1)	Stream Segment (2)	Estimated Length (miles)	Basin	Probable Impaired Uses (3)	Pollution Sources (4)	Severity Index (5)	Control Programs (6)
44	Clark Fork R., Missoula WWTP to Champion International (2)	16	Lower Clark Fork	A(C),P,R	Missoula WWTP,U,O, plus sources in nos. 45,78 & 87	5.04 A,B,C,D,E,F	3,4,5,7
45	Clark Fork R., Warm Springs Cr. to Little Blackfoot R. (2)	38	Upper Clark Fork	A(C),P,R,I	WWTPs,IM,U,O, IA,I,C,F	4.86 A,B,C,D,E,F,G	1,2,3,4,5,7, 8
46	Redwater R. (2)	150	Lower Missouri	A(W),P,R,I	A,N	4.79 B,F	2
47	Chicago Gulch (Judith Mountains)	4	Musselshell	A(C),P,R	IM	4.54 A,B,F	1
48	Tenmile Cr.	12	Missouri-Sun-Smith	A(C),P,R	IM	4.22 B,F,G	1
49	Douglas Cr. at Philipsburg	5	Upper Clark Fork	P,I	IM	3.90 B,F	1
50	Careless Cr. below Deadman's Canal	8	Musselshell	A(W),P,I	IA,HM,N	3.74 A,B,F,G	7
51	Carpenter Cr. (tributary of Belt Cr.)	4	Missouri-Sun-Smith	A(C),P,R	IM	3.69 A,B,F	1
52	Silver Bow Cr. below Warm Springs Ponds (2)	1	Upper Clark Fork	A(C),P,R,I	Butte WWTP,IM,I, Anaconda WWTP,U,O	3.66 A,B,C,D,E,F	1,3,4,5,7,8
53	Arnells Cr. (Judith Mountains)	5	Middle Missouri	A(C),P,R	IM	3.46 A,B,F	1
54	Bluewater Cr. below Orchard Canal (2)	9	Upper Yellowstone	A(C)	IA,HM,N	3.25 B,F,G	2,7
55	South Boulder R. below Hamnoth	15	Upper Missouri	A(C),P,R	IM,M	3.24 B,F	1,5
56	Mission Cr.	18	Lower Clark Fork	A(C),P,R,I	IA,A,N	3.07 B,F,G	2
57	East Gallatin R. below Bozeman WWTP (2)	22	Upper Missouri	A(C),P,R	A,O,U,Bozeman WWTP	2.76 B,F,G	2,3,5
58	Poplar R. (2)	141	Lower Missouri	A(C),P,I	HM,A,N	2.61 B,E,F	2,7
59	Clancy Cr.	12	Missouri-Sun-Smith	A(C),P,R	IM,C	2.57 A,B,F	2,7
60	Musselshell R. below Deadman's Basin Reservoir Diversion (2)	309	Musselshell	A(W),P,R,I	A,IA,HM,C,G,N	2.43 B,F	2,7
61	Peoples Cr.	30	Milk	A(W),P,R,I	A,N	2.36 B	2
62	Post Cr (tributary of Mission Cr.)	13	Lower Clark Fork	A(C),R,I	IA,A,N	2.31 A,B,F,G	2
63	Elk Cr (tributary of Blackfoot R.)	12	Upper Clark Fork	A(C)	IM,N,G	2.07 B,F	2,5
64	Mill-Willow Bypass	4	Upper Clark Fork	A(C),P	IM,O	2.04 B,F	8
65	East Fork Poplar R. (2)	34	Lower Missouri	A(C),P,R,I	HM,A,N	2.04 B,E,F	2,7
66	Yellowstone R., Tongue R. to North Dakota Border (2)	169	Lower Yellowstone	A(W),P,R	IA,WWTPs,N	2.03 B,F	2,3,4,5
67	Crow Creek	12	Lower Clark Fork	A(C),R,I	IA,Ronan WWTP,A,N	1.99 B,F,G	2,3,5
68	Boulder R. below Basin (2)	45	Upper Missouri	A(C),R,P	IM,Boulder WWTP,IA, M,A,HM,C,N	1.88 B,F,G	1,2,3,5,7
69	Dry Fork Marias R. below Conrad WWTP	16	Marias	A(W),P,R	Conrad WWTP,N,A	1.70 B	2,3,5
70	Yellowstone R., Pryor Cr. to Tongue R.	165	Middle Yellowstone	A(W),P,R	WWTPs,I,IA,N	1.68 B,F	2,3,4,5
71	Bighorn R. below Yellowtail Dam (2)	70	Middle Yellowstone	A(C),P,R	HM,A,Hardin WWTP,N	1.65 B,F,G	2,3,5,7
72	Yellowstone R., Clark's Fork R. to Pryor Cr. (2)	30	Upper Yellowstone	A(C),P,R	Billings WWTP,IA, Laurel WWTP,I,U, Yegen Drain,O,N	1.53 A,B,C,D,F	2,3,4,5
73	Little Blackfoot R. (2)	39	Upper Clark Fork	A(C)	IM,IA,A,G,F	1.50 B,F	1,2
74	Sun R. below Muddy Cr. (2)	18	Missouri-Sun-Smith	A(W),P,R	IA,HM,N	1.48 A,B,C,D,F,G	2,6,7
75	Whitefish R. below Whitefish Lake (2)	19	Flathead	A(C),R	Whitefish WWTP, IA,U,O	1.45 A,B,C,D,F,G	2,3,5,6,7
76	Ashley Cr. above Kalispell WWTP (2)	20	Flathead	A(C),P,R	A,N	1.44 A,B	2
77	Silver Cr. (2)	22	Missouri-Sun-Smith	A(C),P	IM,M	1.30 B,F,G	1,5
78	Clark Fork R., Blackfoot R. to Missoula WWTP (2)	10	Lower Clark Fork	A(C),P,R	Milltown Reservoir, U,O,plus sources in nos. 45 and 87	1.22 A,B,C,D,E,F,G	1,4,5,7,8
79	Beaverhead R. (2)	35	Upper Missouri	A(C),P,R,I	IA,Dillon WWTP,HM	1.21 B,F,G	2,3,5
80	Missouri R.blw.Fort Peck Dam(2)	185	Lower Missouri	A(W),P,R,I	HM,A,N	1.16 B,F	2
81	Lump Gulch Cr.	13	Missouri-Sun-Smith	A(C),P	IM	1.09 A,B,F,G	7
82	Missouri R. above Canyon Ferry Reservoir	41	Missouri-Sun-Smith	A(C),P,R	IA,WWTPs,N	1.06 B,D,F	2,3
83	Stillwater R. below Logan Cr.(2)	31	Flathead	A(C),R	IA,A,F,O,U, Whitefish WWTP	0.96 A,B,C,D,F,G	2,3,5,6,7

Table 3-2 Continued

Map No. (1)	Stream Segment (2)	Estimated Length (miles)	Basin	Probable Impaired Uses (3)	Pollution Sources (4)	Severity Index (5)	Control Programs (6)
84	Clark Fork R., Champion International to Huson (2)	9	Lower Clark Fork	A(C),P,R	Champion Paper Mill, Missoula WWTP plus sources in nos. 44, 45, 78 and 87	0.95 A,B,C,D,E,F	3,4,5,7
85	Clark Fork R., Huson to Flathead R. (2)	85	Lower Clark Fork	A(C),P,R	Same as sources in nos. 44,45,78,84 & 87	0.93 A,B,C,D,E,F	1,2,3,4,5,7, 8
86	Little Peoples Cr. (Little Rocky Mountains)	20	Milk	A(C),P	IN,G	0.93 B,D,F	1,2
87	Clark Fork R., Little Blackfoot R. to Blackfoot R.(2)	81	Upper Clark Fork	A(C),P,R	N,HM plus sources in no. 45	0.86 A,B,C,D,E,F,G	1,2,3,4,5,8
88	Milk R. below Fresno Dam (2)	437	Milk	A(W),P,R,I	IA,WWTPs,N	0.79 A,B,F	2,3
89	Big Spring Cr. below Lewistown WWTP (2)	17	Middle Missouri	A(C),R	Lewistown WWTP, A,HM	0.72 B,D,F	2,3,5
90	Missouri R., Canyon Ferry Dam to Sun R. (2)	132	Missouri-Sun-Smith	A(C),P,R	HM,A	0.63 B,C,D,F	2
91	Missouri R., Sun R. to Fort Peck Reservoir (2)	223	Middle Missouri	A(W),P,R	IA,WWTPs,N	0.63 B,C,F	2,3
92	Flint Cr.	44	Upper Clark Fork	A(C),P	IN,IA	0.62 B,F	2,4
93	Clark Fork R., Flathead R. to below Cabinet Gorge Dam (2)	100	Lower Clark Fork	A(C),P,R	Same as sources in nos. 44,45,78,84 & 87 plus Thompson Falls, Noxon & Cabinet Gorge Reservoirs	0.55 A,B,C,D,E,F,G	1,2,3,4,5,7, 8
94	Marias R. below Pondera Coulee	74	Marias	P,R	A,N	0.54 B,F	2
95	Pondera Coulee	77	Marias	I	A,N	0.52 A,B	2
96	Basin Cr.	12	Upper Missouri	A(C)	IN	0.52 A,B	1
97	Yellowstone R. above Clark's Fork R. (2)	190	Upper Yellowstone	A(C),R	IN,A,F,G,N	0.48 B,F	1,2,4,7
98	Grasshopper Cr. below Bannack(2)	18	Upper Missouri	A(C)	IN,G	0.28 B,F,G	1,2
99	Warm Springs Cr. below Anaconda	7	Upper Clark Fork	A(C),P,R	IN	0.27 B,F	8
100	Bitterroot R. (2)	80	Lower Clark Fork	A(C),P	IA,HM,O	0.24 B,C,F	2,5,7
101	Fisher R. (2)	64	Kootenai	A(C)	HM,C,F,A	0.24 B,F	2
102	Little Bighorn R.	116	Middle Yellowstone	A(C)	A	0.11 B,F	2
103	Two Medicine R. below Badger Cr.	50	Marias	A(C)	IA,A	0.09 B,F	2
104	Madison R. below Ennis Lake (2)	40	Upper Missouri	A(C)	HM,IA	0.08 B	2,7
105	Daisy Cr. below McLaren Mine	3	Upper Yellowstone	A(C)	IM	(7) A,B,F	1
106	Stanley Cr. (2)	3	Kootenai	A(C)	M	(7) A,B,F	5
107	Big Hole R. below Melrose (2)	39	Upper Missouri	A(C)	IA	(7) B,D,F	2
		4662					

(1) Problem segments are mapped in Figure 1.

(2) Impairment of aquatic life in the problem segment has been confirmed by a biological survey.

(3) A(C) = Aquatic life (cold water)
A(W) = Aquatic life (warm water)
P = Public Water supply
R = Primary contact recreation
I = Irrigation
L = Livestock watering

(4) A = Agriculture (multiple practices)
C = Construction
F = Forest practices
G = Grazing
HM = Hydrologic modification
I = Industrial discharge
IA = Irrigated agriculture
IM = Inactive mining
M = Mining
N = Natural
O = Onsite domestic waste disposal
U = Urban runoff
WWTP = Wastewater treatment plant

(5) A = Downstream use(s) impaired
B = Improved water quality attainable
C = Large population affected
D = Valued resource affected
E = Interstate, national or international issue
F = Local interest and involvement
G = Unnatural flow fluctuation

(6) 1 = Abandoned mine land reclamation program (DSL and DSM)
2 = Agricultural conservation programs (SCS, ASCS, CES, DNRC, County Conservation Districts, Ag. Experiment Station)
3 = Construction grants program (DHES and EPA)
4 = Instream flow reservations (DHES and DFWP)
5 = MPDES permits and enforcement program (DHES and EPA)
6 = Renewable resource development program and water development program (DNRC)
7 = Special water quality improvement projects
8 = Superfund

(7) Excursions from criteria have been documented using data that are not on STORET

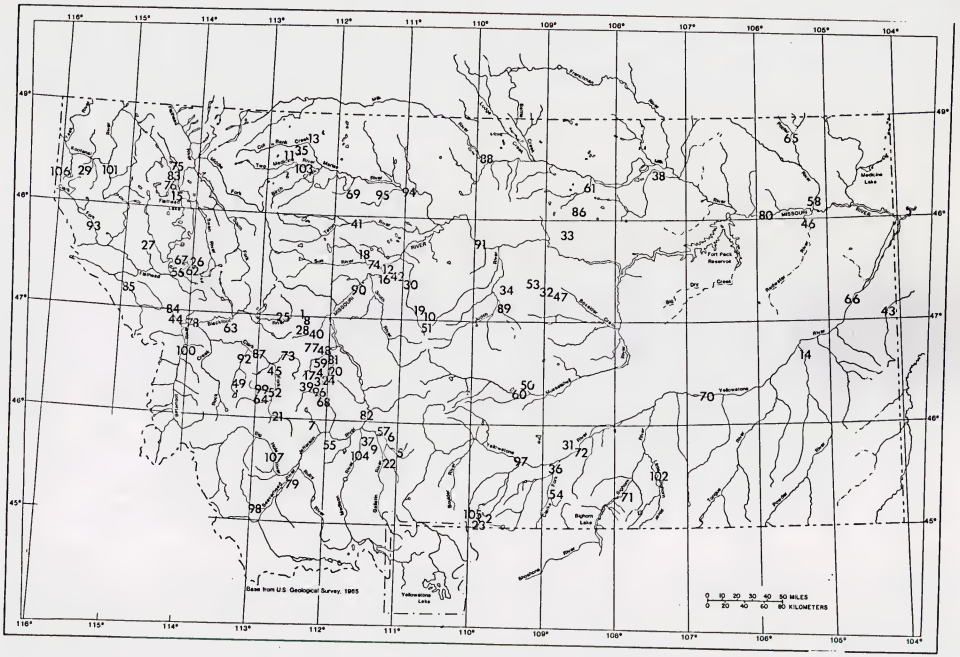

Figure 3-1. Montana stream segments having predominantly man-caused water quality problems.

Table 4-2. Major sources of ground water contamination in Montana

Source	Major Source	Rank*
Septic tanks	X	4
Municipal landfills		
On-site industrial landfills (excluding pits, lagoons, surface impoundments)		
Other landfills		
Surface impoundments (excluding oil and gas brine pits)	X	6
Oil and gas brine pits		
Underground storage tanks	X	1
Injection wells		
Abandoned hazardous waste sites	X	3
Regulated hazardous waste sites		
Salt water intrusion		
Land application/treatment		
Agricultural activities	X	5
Road salting		
Mineral Processing	X	2

* 1 = most serious

Table 4-3. Substances contaminating ground water in Montana.

Organic chemicals:	
Volatile	X
Synthetic	
Inorganic chemicals:	
Nitrates	X
Fluorides	
Arsenic	X
Brine/salinity	X
Cyanide	X
Metals	X
Radioactive material	
Pesticides	X
Other (specify)	

Figure 4-2

MONTANA
1985
Groundwater Contamination

Table 6-7. Summary of nonpoint source impacts to surface waters, by intensity. (Streams are measured in miles, lakes, reservoirs and wetlands in acres.)

Water Body Type	Quantity of Assessed Waters	Intensity of Nonpoint Source Impact			
		Severe	Moderate	Threatened	Minor
Streams	19,168	427	6,377	976	11,388
Lakes and Reservoirs (less than 5,000 acres)	236,000	13,250	6,236	33,234	183,280
Lakes and Reservoirs (more than 5,000 acres)	520,450	0	14,359	452,148	53,943
Wetlands	2,000,000	unknown	unknown	unknown	unknown

Table 6-8. Summary of nonpoint source impacts to surface waters by source categories.

Source Category	Streams (miles)	Lakes and Reservoirs (acres)
Agriculture	5,930	101,200
Forest Practices	355	3,200
Mining	1,320	35
Land Disposal	50	132,890
Hydromodification	20	280,332
Urban Runoff	5	1,570
Construction	90	0
Other	10	0
Totals	7,780	519,227

Table 6-9. Summary of nonpoint source impacts to surface waters, by pollutant.

Pollutants	Streams (miles)	Lakes and Reservoirs (acres)
Sediment/Turbidity	6,275	26,900
Nutrients/Fertilizers	160	185,000
Pesticides	4	0
Toxics (mostly metals)	575	35
Acidity	1	unknown
Pathogens	20	1,400
Salinity	535	22,000
Oxygen Demand	unknown	unknown
*Alteration of Physical Habitat	210	283,892
Totals	7,780	519,227

*Includes impacts from hydrological modification.

Table 6-10. Nonpoint source impacts on surface waters in Montana. (Streams are measured in miles, lakes and reservoirs in acres; U = Unknown)

Nonpoint Source Pollutant	Water Bodies Aggregate Size	Intensity of Nonpoint Source Impact			Nonpoint Source Categories							
		Severe	Moderate	Threatened	Agri-culture	Forest Practices	Constr-uction	Urban Runoff	Resource Extrac-tion and Residue	Land Disposal	Hydro-modifi-cation	Other
SEDIMENT/TURBIDITY												
Streams	6600	180	5900	520	4650	450	250	230	480	120	400	20
Lakes and Reservoirs	441865	0	10420	431445	29340	3175	U	U	U	128950	280400	U
NUTRIENTS/FERTILIZER												
Streams	3000	50	2890	60	2000	10	130	230	150	100	380	U
Lakes and Reservoirs	185000	0	2900	182100	10500	U	U	1580	U	132920	40000	U
PESTICIDES												
Streams	40	0	5	35	40	U	0	U	0	U	0	U
Lakes and Reservoirs	U	U	U	U	U	U	U	U	U	U	U	U
TOXICS												
Streams	900	170	700	30	U	0	U	U	890	U	0	10
Lakes and Reservoirs	35	0	0	35	U	U	U	U	35	U	U	U
ACIDITY												
Streams	90	35	55	0	0	0	0	0	90	0	0	0
Lakes and Reservoirs	0	0	0	U	0	0	0	0	0	0	0	0
PATHOGENS												
Streams	190	40	130	20	188	0	0	0	0	2	0	0
Lakes and Reservoirs	4000	0	1400	2600	4000	U	0	U	0	U	0	0
SALINITY												
Streams	2490	145	1855	400	2155	0	0	0	250	0	20	0
Lakes and Reservoirs	22000	0	8750	13250	22000	0	0	U	U	0	U	0
OXYGEN DEMAND												
Streams	U	0	0	U	U	U	0	0	0	0	U	0
Lakes and Reservoirs	1600	0	0	1600	U	U	0	1600	0	U	U	0
PHYSICAL HABITAT ALTERATION												
Streams	1450	6	1420	24	820	190	40	20	320	40	20	0
Lakes and Reservoirs	3570	0	3570	0	3570	U	U	0	0	0	U	0
TEMPERATURE												
Streams	1830	15	1760	55	1250	U	0	0	0	0	575	0
Lakes and Reservoirs	320400	0	0	320400	0	0	0	0	0	0	320400	0
DEWATERING												
Streams	1160	35	1125	U	1160	0	0	0	0	0	0	0
Lakes and Reservoirs	U	U	U	U	U	U	U	U	U	U	U	U

Table 6-11. Streams in Montana with uses impaired by nonpoint sources of pollution.

Stream Name	County	Stream Name	County
Uses Severely Impaired			
Avalanche	Broadwater	Twin Lakes	Deer Lodge
Beaver	Lewis & Clark	Uncle Sam*	Jefferson
Careless*	Golden Valley	Washington	Powell
Carpenter*	Cascade	White's Gulch	Broadwater
Cataract*	Jefferson	Willow*	Deer Lodge
Coffee	Fergus		
Coller Gulch*	Fergus		
Confederate Gulch	Broadwater		
Corbin*	Jefferson		
Cottonwood*	Cascade		
Daisy*	Park		
Dog	Fergus		
Dry Fork Belt*	Cascade		
Dry Wolf	Fergus		
Elk*	Missoula		
Fisher*	Park		
Galena*	Judith Basin		
Godfrey*	Gallatin		
High Ore*	Jefferson		
Hoover	Powell		
Hot Springs*	Sanders		
Indian	Broadwater		
Jefferson	Powell		
Lime	Lincoln		
Little Bitterroot River	Sanders		
Mike Horse*	Lewis & Clark		
Mill	Deer Lodge		
Monarch	Deer Lodge		
Muddy*	Cascade		
Number Five Coulee*	Cascade		
Prickly Pear*	Lewis & Clark		
Sage	Hill		
Sand Coulee*	Cascade		
Silver*	Lewis & Clark		
Silver Bow*	Silver Bow		
Snowshoe*	Lincoln		
Soda Butte*	Park		
South Boulder River*	Madison		
Spring*	Jefferson		
Sun River*			
Trout	Lewis & Clark		

Table 6-11. Continued

Stream Name	County	Stream Name	County
Uses Moderately Impaired			
Arnells*	Fergus	Cottonwood	Cascade
Bear	Carbon	Crane	Richland
Bear	Powell	Crow*	Lake
Beaver	Broadwater	Cut Bank	Glacier
Beaver	Fergus	Deep	Broadwater
Beaver	Hill	Deep	Teton
Beaver	Meagher	Deapsey	Powell
Beaver*	Phillips	Dog	Powell
Beaver*	Wibaux	Douglas*	Granite
Beaverhead River*		Douglas	Powell
Belt*	Cascade	Dry	Broadwater
Benton Gulch	Meagher	Dry Cottonwood	Deer Lodge
Big Hole River*		Dry Cottonwood	Powell
Big Pipestone	Jefferson	East Fork Indian	Broadwater
Big Sandy	Hill	East Fork Poplar River*	
Big Spring*	Fergus	East Gallatin River*	
Bighorn River*		Elkhorn	Beaverhead
Birch	Pondera	Elkhorn	Jefferson
Bitterroot River*	Ravalli	Elliston	Powell
Blackfoot River*		First Hay	Richland
Blacktail Deer	Beaverhead	Fish Trap	Sanders
Blodgett	Ravalli	Fisher River*	
Bluewater*	Carbon	Flat	Lewis & Clark
Bonnie Peer	Richland	Flathead River*	
Boulder River*	Jefferson	Flat Willow	Fergus
		Flint*	Granite
Box Elder	Cascade	Fool Hen*	Lewis & Clark
Brock	Powell	Ford	Lewis & Clark
Bull Hook	Hill	Fox	Richland
Butte	Daniels	Frazier	Powell
Cable	Deer Lodge	Gallagher	Powell
Cache	Gallatin	Gallatin River*	
Camas	Sanders	Gold	Powell
Camp*	Gallatin	Grasshopper*	Beaverhead
Canyon*	Yellowstone	Halfway	Powell
Chamberlain	Powell	Hardscrabble	Richland
Cherry	Lincoln	Horse Prairie	Beaverhead
Chicago Gulch*	Fergus	Hound	Cascade
Clancy*	Jefferson	Hyalite*	Gallatin
Clark Canyon	Beaverhead	Idaho	Madison
Clark Fork River*		Jefferson	Powell
		Jefferson River	

Table 6-11. Continued

Stream Name	County	Stream Name	County
Judith River		O'Brien	Richland
Keeler	Lincoln	Otter	Cascade
Kennedy	Missoula	Peterson	Powell
Keyser	Richland	Petty	Missoula
La Velle	Missoula	Poplar River*	
Libby	Lincoln	Post*	Lake
Little Belt	Cascade	Potter	Meagher
Little Bighorn River*		Poorman	Lewis & Clark
Little Blackfoot River*		Prospect	Sanders
Little Box Elder	Hill	Racetrack	Powell
Little Joe	Mineral	Ramshorn	Madison
Little Peoples*	Blaine	Randolph	Mineral
Little Prickly Pear	Lewis & Clark	Rattlesnake	Missoula
Little Rocky	Stillwater	Red Rock River	
Lolo	Missoula	Redwater River*	
Lone Tree	Richland	Roaring Lion	Ravalli
Lost	Deer Lodge	Rock	Powell
Lost Horse	Ravalli	Ross Fork	Fergus
Lump Gulch*	Jefferson	Ruby River	
Lynch	Sanders	Sabine	Lake
Marias River*		Sage	Hill
McCormick	Missoula	St. Regis River	
McDonald	Fergus	Saline	Beaverhead
McElwain	Powell	Schwartz	Missoula
Medicine Lodge	Beaverhead	Sears	Richland
Middle Fork Warm Springs	Jefferson	Sheep	Meagher
Milk River*		Sheep	Powell
Mill	Deer Lodge	Shields River	
Miller	Missoula	Six Mile	Meagher
Mission*	Lake	Sixteenmile	Meagher
Missouri River*		Sleeping Child	Ravalli
Modesty	Deer Lodge	Smith	Richland
Monarch	Deer Lodge	Smith River	
Montana Gulch*	Phillips	Snowshoe	Powell
Monture	Powell	Soap	Big Horn
Mud	Lake	Spotted Dog	Powell
Muddy	Beaverhead	Spring*	Lake
Musselshell River*		Stillwater River*	Flathead
Nevada	Powell	Stillwater River	Stillwater
Newlan	Meagher	Sullivan	Sanders
Ninemile	Missoula	Taylor Fork	Gallatin
North Fork Muddy	Teton	Telegraph	Powell
O'Brien	Missoula	Tenmile*	Lewis & Clark

Table 6-11 Continued

Stream Name	County
Thompson Gulch	Meagher
Thompson River	
Threemile	Powell
Threemile	Ravalli
Tin Cup Joe	Powell
Tobacco River	
Trapper	Beaverhead
Trout	Sanders
Two Medicine River*	
Valley	Stillwater
Virginia*	Lewis & Clark
Wales	Powell
Ward	Powell
Warm Spring	Fergus
Warm Springs*	Deer Lodge
Warm Springs	Powell
Warren	Powell
West Miller Coulee	Lake
West Rosebud	Stillwater
Whitefish River*	
Willow*	Deer Lodge
Willow	Teton
Wilson	Jefferson
Wolf	Lincoln
Yellowstone River*	
Yourname	Powell

* Stream has recent (post-1975) data in STORET indicating that one or more beneficial uses are impaired (See Table 3-2 and Appendix.)

Table 6-12. Lakes and reservoirs in Montana with uses impaired by nonpoint sources of pollution.

Uses Severely Impaired (13,250 acres)
Benton Lake (Cascade County)
Freezeout Lake (Teton County)
Lake Bowdoin (Phillips County)
Priest Butte Lakes (Teton County)
Uses Moderately Impaired (20,595 acres)
Duck Lake (Glacier County)
Echo Lake (Flathead County)
Fresno Reservoir (Hill County)
Hailstone Lake (Stillwater County)
Lake Francis (Pondera County)
Lake Helena (Lewis and Clark County)
Lebo Lake (Wheatland County)
Medicine Lake (Sheridan County)

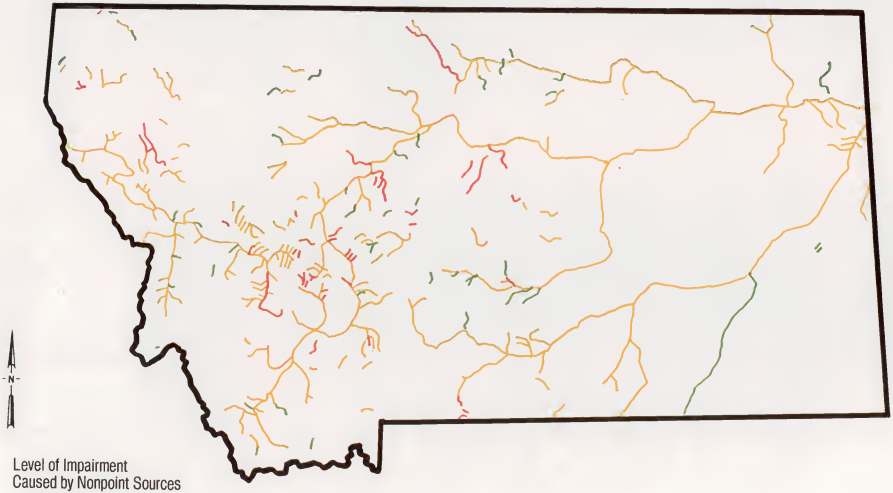

Figure 6-1
MONTANA
1985
Nonpoint Source Surface Water
Designated Use Impairments.

Table 6-13. Summary of nonpoint source control programs in Montana.

Program	Administering Agencies: Local	State	Federal	Program: Type	Extent	Nonpoint Source Activities	Effectiveness of Water Quality Protection
State Water Quality Management Program (Section 205, Clean Water Act)	Conservation Districts	WQB-DHES CDD-DNRC	BLM FS EPA	Voluntary	Statewide	Agriculture Forest Practices Construction Resource Extraction and Residue	Locally/ Partially
Agricultural Conservation Program			ASCS	Incentive	Statewide	Agriculture	Partially
Great Plains Conservation Program			SCS	Incentive	Regional	Agriculture	Partially
Bureau of Land Management's land management responsibilities			BLM	Regulatory	Statewide	Agriculture Construction Forest Practices Resource Extraction and Residue	Partially
US Forest Service's forest land management responsibilities			FS	Regulatory	Statewide	Forest Practices Resource Extraction and Residue	Partially
Bureau of Reclamation activities			BR	Other	Statewide	Hydro-modification	Partially
Cooperative Extension Service activities			ES	Voluntary	Statewide	Agriculture Forest Practices	Partially
Pesticide Application Licensing Program		DOA	EPA	Regulatory	Statewide	Agriculture	Partially
Abandoned Mine Land Reclamation Fund		DSL	OSM	Regulatory	Statewide	Resource Extraction and Residue	Locally/ Partially
US Fish & Wildlife Service programs			FWS	Other	Local	Habitat Management	Locally/ Partially
State Certification pursuant to Section 401 of the Clean Water Act		WQB-DHES	COE	Regulatory	Statewide	Hydromodif-ication Forest Practices	Locally/ Partially "
Federal Certification pursuant to section 401 of the Clean Water Act			FS EPA	" Regulatory	" Statewide (on Indian Reservations)	All	Locally/ Partially
Renewable Resource Development Funds and Water Development Program Funds		WRD-DNRC		Incentive	Statewide	Agriculture Forest Practices Resource Extractinn and Residue	Locally/ Partially
223 Progam for funding conservation projects through Conservation Districts	Conservation Districts	CDD-DNRC		Incentive	Statewide	Agriculture Forest Practices	Locally/ Partially
Montana Salinity Control Association	Conservation Districts	CDD-DNRC		Voluntary	Regional	Agriculture	Locally/ Partially

Table 6-13 Continued

Program	Administering Agencies: Local	State	Federal	Program: Type	Extent	Nonpoint Source Activities	Effectiveness of Water Quality Protection
Stream Protection Act Permits		DFWP		Regulatory	Statewide	Hydro-modification	Locally/ Partially
Natural Streambed and Land Preservation Act Permits (310)	Conservation Districts	CDD-DNRC DFWP		Regulatory	Statewide	Hydro-modification	Locally/ Partially
Sanitation in Subdivisions	Health Departments	WQB-DHES		Regulatory	Statewide	Subdivision Wastewater Disposal	Locally/ Partially
Cooperative Forest Management		DSL		Voluntary	Regional	Forest Practices on Watersheds with Intermingled Ownership	Locally/ Partially
Watershed Protection and Flood Prevention Program (PL 566)			SCS	Incentive	Statewide		Ineffective or Partially
Hazardous & Solid Waste Management Programs & Superfund		SHWB-DHES	EPA	Regulatory	Statewide	Resource Extraction Land Disposal Storage Tanks Hazardous Waste Storage	Locally/ Partially
Office of Surface Mining active mining regulatory responsibilities		DSL	OSM	Regulatory	Statewide	Resource Extraction and Residue	Locally/ Partially
Sediment Control Ordinance	Lewis & Clark Conservation District			Regulatory	Local	All	Partially
Soil Conservation ("sodbusting") Ordinance	Petroleum Conservation District			Regulatory	Local	Agriculture	New
Conservation Reserve Program			ES SCS ASCS	Voluntary	Statewide	Agriculture	New
Underground Injection Control			EPA	Regulatory	Statewide	Resource Extraction and Residue; Petroleum Production	New

State Agencies
- WQB-DHES = Water Quality Bureau, Department of Health and Environmental Sciences
- CDD-DNRC = Conservation Districts Division, Department of Natural Resources and Conservation
- DDA = Department of Agriculture
- DSL = Department of State Lands
- WRD-DNRC = Water Resources Division, Department of Natural Resources and Conservation
- DFWP = Department of Fish, Wildlife and Parks
- SHWB-DHES = Solid and Hazardous Waste Bureau, Department of Health and Environmental Sciences

Federal Agencies
- BLM = Bureau of Land Management
- FS = Forest Service, U.S. Department of Agriculture (USDA)
- EPA = Environmental Protection Agency
- ASCS = Agricultural Stabilization and Conservation Service, USDA
- SCS = Soil Conservation Service, USDA